CLAIMS

What is claimed is:

1. A method for grain equalization utilizing double dotting, comprising the steps of:

determining a drop weight of each die in a multi-die printhead to print a given ink;

determining the highest drop weight amongst all of the dies; and

determining a percentage of double dotting that is needed to substantially match a grain of the highest drop weight die.

2. The method, as in Claim 1, wherein the method is further comprised of the step of:

using a color compensation algorithm to equalize a color from each die.

3. The method, as in Claim 1, wherein the method is further comprised of the step of:

printing a test pattern.

4. The method, as in Claim 1, wherein the method is further comprised of the step of:

measuring a test pattern.

5. The method, as in Claim 1, wherein the method is further comprised of the step of:

determining if a color density of the test pattern is satisfactory.

6. The method, as in Claim 1, wherein the highest drop weight determination step is further comprised of the step of:

measuring a relative drop weight between each die for that particular color.

7. The method, as in Claim 1, wherein the highest drop weight determination step is further comprised of the step of:

measuring an actual drop weight between each die for that particular color.

8. The method, as in Claim 1, wherein the percentage of double dotting determination step is further comprised of the step of:

comparing an increase in double dotting with an increase in drop weight.

9. The method, as in Claim 1, wherein the percentage of double dotting determination step is further comprised of the step of:

varying the amount of double dotting employed based upon the content of the printed page.

10. The method, as in Claim 1, wherein the test pattern color density determination step is further comprised of the step of:

determining if a color density printed by the adjacent dies is satisfactory.

11. A method for grain equalization in a print job, comprising the steps of:

determining an average drop weight of each die in a multi-die printhead to print a given ink;

determining the highest drop weight amongst all of the dies;

determining a percentage of double dotting that is needed to substantially match a grain of the highest drop weight die;

printing a test pattern; and

determining if a color density of the test pattern is satisfactory.

12. The method, as in Claim 11, wherein the method is further comprised of the step of:

using a color compensation algorithm to compensate for residual die-to-die graininess differences.

13. The method, as in Claim 11, wherein the highest drop weight determination step is further comprised of the step of:

measuring an actual drop weight for each die for that particular color.

14. The method, as in Claim 11, wherein the highest drop weight determination step is further comprised of the step of:

measuring a relative drop weight for each die for that particular color.

15. The method, as in Claim 11, wherein the percentage of double dotting determination step is further comprised of the step of:

comparing an increase in double dotting with an increase in drop weight.

16. The method, as in Claim 11, wherein the percentage of double dotting determination step is further comprised of the step of:

varying the amount of double dotting employed based upon printed density levels.

17. The method, as in claim 11, wherein the test pattern printing step is further comprised of the step of:

measuring the test pattern.

18. A program storage medium readable by a computer, tangibly embodying a program of instructions executable by the computer to perform method steps for grain equalization in a print job, comprising the steps of:

determining an average drop weight of each die in a multi-die printhead to print a given ink;

determining the highest drop weight amongst all of the dies;

determining a percentage of double dotting that is needed to substantially match a grain of the highest drop weight die; and

printing a test pattern.

19. The program storage medium, as in Claim 18, wherein the method is further comprised of the step of:

measuring the test pattern.

20. The program storage medium, as in Claim 18, wherein the method is further comprised of the step of:

using a color compensation algorithm to compensate for residual die-to-die graininess differences.

21. The program storage medium, as in Claim 18, wherein the highest drop weight determination step is further comprised of the step of:

measuring an actual drop weight for each die for that particular color.

22. The program storage medium, as in Claim 18, wherein the highest drop weight determination step is further comprised of the step of:

measuring a relative drop weight for each die for that particular color.

23. The program storage medium, as in Claim 18, wherein the percentage of double dotting determination step is further comprised of the step of:

comparing an increase in double dotting with an increase in drop weight.

24. The program storage medium, as in Claim 18, wherein the percentage of double dotting determination step is further comprised of the step of:

varying the amount of double dotting employed based upon printed densities.

25. The program storage medium, as in Claim 18, wherein the test pattern color density determination step is further comprised of the step of:

determining if a color density printed by the adjacent dies is satisfactory.

26. A system for grain equalization in a print job, comprising:

a determining means for determining an average drop weight of each die in a multi-die printhead to print a given ink;

a determining means for determining the highest drop weight amongst all of the dies;

a determining means for determining a percentage of double dotting that is needed to substantially match a grain of the highest drop weight die;

a printing means for printing a test pattern.

27. The system, as in Claim 26, wherein the apparatus is further comprised of:

a means for utilizing a color compensation algorithm to equalize a color from each die.

28. The system, as in Claim 26, wherein the highest drop weight determination means is further comprised of:

a means for measuring an actual drop weight for each die for that particular color.

29. The system, as in Claim 26, wherein the highest drop weight determination means is further comprised of:

a means for measuring a relative drop weight for each die for that particular color.

30. The system, as in Claim 26, wherein the percentage of double dotting determination means is further comprised of:

a means for comparing an increase in double dotting with an increase in drop weight.

31. The system, as in Claim 26, wherein the percentage of double dotting determination step is further comprised of the step of:

a means for varying the amount of double dotting employed based upon printed densities.

32. The system, as Claim 26, wherein the test pattern printing step is further comprised of the step of:

a means for measuring the test pattern.